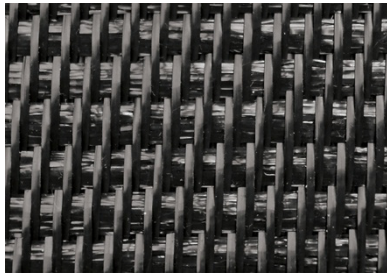




# FX<sup>®</sup>-MF and TF High-Performance Geotextiles

REINFORCEMENT | SEPARATION | STABILIZATION | FILTRATION | CONFINEMENT

## CARTHAGE FX-MF AND TF HIGH-PERFORMANCE SERIES OF WOVEN GEOTEXTILES



### ■ SERIES DESCRIPTION

Carthage Mills' FX-MF and TF High-Performance Series of woven polypropylene geotextiles were developed to deliver the higher strengths and long-term performance that cannot be achieved by typical woven slit-film geotextiles.

The FX-MF and TF High-Performance Series of geotextiles are produced of 100% high-tenacity polypropylene yarns. Utilizing a variety of unique weave patterns, they are designed for separation, stabilization and reinforcement, while still providing excellent filtration and drainage in a wide range of applications from moderate to severe site conditions.

Whether the emphasis is on filtration, high tensile properties, and/or long-term performance, these versatile and durable geotextiles can provide quick and easy solu-

tions to other costly alternatives.

### ■ FEATURES AND BENEFITS

Carthage Mills' FX-MF and TF High-Performance Series of woven polypropylene geotextiles are designed to provide cost-saving solutions in a wide range of applications and varying site conditions, making them one of the most complete and versatile lines of geosynthetics in the industry.

#### ■ SEPARATION and FILTRATION

Unique weave patterns prevent dissimilar materials from intermixing while providing free flowing drain-age assuring long-term functionality of materials.

#### ■ STABILIZATION AND REINFORCEMENT

High tensile modulus at low strains and excellent soil interaction delivers immediate support in moderate to severe conditions.

#### ■ DURABILITY

Superior resistance to installation damage assures long-term performance.

#### ■ HIGH SEAM STRENGTHS

Achieve the high seam strengths that are essential in all closure and confinement applications; and allows for seaming to run

perpendicular to the centerline in highway construction.

#### ■ COST SAVINGS

When low-cost and high performance is combined, savings in *structural materials* and *labor costs* can be as much as 35-40%.

### ■ APPLICATIONS

The combination of strengths, durability and filtration/flow characteristics make the Carthage FX-MF and TF High-Performance Series of woven geotextiles uniquely versatile in their ability to deliver in:

- Base Course Reinforcement for highways, railways, roads, and parking lots.
- Reinforcement for Mechanically Stabilized Earth (MSE) structures or walls
- Embankments and Dikes on soft soils and foundations
- Voids Bridging in landfills (liner support), highways and runways
- Reinforcement in steepened slopes
- Capping/Closures in landfills and other hazardous waste sites
- Erosion Control; shoreline protection under large riprap
- Containment





## FX<sup>®</sup>-MF and TF High-Performance Woven Geotextiles

Carthage Mills' FX- MF and TF Series of High-Performance geotextiles are produced from 100% high-tenacity polypropylene yarns. The Carthage [FX<sup>®</sup> High-Performance Series](#) of woven geotextiles, is inert to biological degradation, and resistant to naturally encountered chemicals, alkalis and acids.

Note: The listing below is a sampling of available products in this Series of High-Performance Geotextiles. For more information and/or a complete listing of all the products in this Series, please call or visit our website.

PROPERTY	ASTM TEST	UNIT	FX <sup>®</sup> -200MF	FX <sup>®</sup> -270MF	FX <sup>®</sup> -270TF	FX <sup>®</sup> -300MF	FX <sup>®</sup> -370MF	FX <sup>®</sup> -375MF	FX <sup>®</sup> -570MF <sup>(1)</sup>	FX <sup>®</sup> -400TF
<b>□ Mechanical/Performance</b>										
Wide Width Tensile Ultimate	D 4595	lbs/ft	2400	2640 x 2460	3179 x 2711	3600	3600 x 3240	3600 x 3300	4800	5070
Wide Width Elongation @ Ult.		%	12 x 8	NP	11.4 x 7.9	15 x 10	NP	NP	NP	10
Wide Width Tensile @ 2%		lbs/ft	240 x 240	480 x 588	290 x 800	480 x 420	540	NP	960 x 1320	NP
Wide Width Tensile @ 5%			780 x 1404	1212 x 1356	1000 x 1700	1392 x 1740	1500 x 1560	1500 x 1560	2400 x 2700	NP
Wide Width Tensile @ 10%			1800 x 2520	NP	2100 x 3000	3180 x 3480	NP	NP	4800	NP
<b>□ Mechanical/Index</b>										
Grab Tensile Strength	D 4632	lbs	320	295 x 260	350 x 350	450 x 350	450 x 320	NP	500 x 475	550
Grab Tensile Elongation		%	15	13% x 12%	20 x 15	15 x 6	12 x 10	NP	11 x 4	17
Trapezoidal Tear	D 4533	lbs	125	110 x 130	120	180 x 140	150 x 160	NP	180	180
CBR Puncture	D 6241		1400	1000	1000	1600	1300	NP	2000	1700
<b>□ Endurance</b>										
UV Resistance	D 4355	% @ 500 hrs	90	80	80	80	80	80	80	80
<b>□ Hydraulics/Filtration</b>										
Permittivity	D 4491	sec <sup>-1</sup>	0.70	0.60	0.15	0.52	0.90	0.52	0.40	0.14
Water Flow Rate		gpm/ft <sup>2</sup>	50	40	11	40	40	40	30	10.5
Apparent Opening Size (AOS)	D 4751	US Std Sieve	40	30	40	30	40	30	30	40
<b>□ Physical</b>										
Standard Roll Sizes Packaging Weight	Measured (Typical)	ft yd <sup>2</sup>	15 x 300	15 x 300	15 x 300	15 x 300	15 x 300	15 x 300	15 x 300	15 x 300
		lbs	500	500	500	500	500	500	500	500
		ft yd <sup>2</sup>	275	213	352	325	290	320	389	357
		lbs	-	-	-	-	-	-	-	17.1 x 325
										614
										448

NOTES: Mullen Burst Strength ASTM D 3786 is no longer recognized by ASTM D35 on Geosynthetics. Puncture Strength ASTM D 4833 is not recognized by AASHTO M 288-15 and has been replaced with CBR Puncture ASTM D 6241.

<sup>(1)</sup> Formerly FX-400MF

- Unless otherwise stated, all values stated here are Minimum Average Roll Values (MARV).
- The properties reported above are effective 01-01-18 and are subject to change without notice.

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